

Listing of Amended Claims

1. (Previously Amended): An ethylene polymer composite having improved melt strength comprising:

- (a) 76 to 99.25 weight percent, based on the weight of the total composition, of an ethylene homopolymer or ethylene- C_{3-8} α -olefin copolymer base resin;
- (b) 0.5 to 12 weight percent of an organically modified clay consisting of a smectite clay that has been ion-exchanged and intercalated with a dimethyl dihydrogenated tallow quaternary ammonium ion; and
- (c) 0.25 to 12 weight percent of an ethylene polymer compatibilizing agent selected from the group consisting of ethylene-vinyl carboxylate copolymers and polymers of ethylene having from 0.1 to 8 weight percent ethylenically unsaturated carboxylic acid or derivative monomer copolymerized or grafted; the weight ratio of (b) to (c) ranging from 1:5 to 1:0.1.

2. (Cancelled)

~~3.~~ ² (Previously Amended): The composite of Claim 1 wherein the smectite clay is montmorillonite.

~~4.~~ ³ (Previously Amended): The composite of Claim 1 wherein the smectite clay is montmorillonite and the modifier is dimethyl dihydrogenated tallow having a concentration is 90 to 130 meq/100g.

~~5.~~ ⁴ (Previously Amended): The composite of Claim 1 wherein the compatibilizing agent is a copolymer of ethylene and 3 to 35 weight percent vinyl acetate having a melt index from about 0.25 to 40 g/10 min.

~~6.~~ ⁵ (Original): The composite of Claim 1 wherein the compatibilizing agent is an ethylene polymer grafted with 0.2 to 4 weight percent maleic anhydride having a melt index from about 0.25 to 40 g/10 min.

~~7.~~⁶ (Original): The composite of Claim 1 wherein the weight ratio of organically modified clay to compatibilizing agent is from 1:1 to 1:0.25.

~~8.~~⁷ (Previously Amended): The composite of Claim ~~3~~² having a melt index of 0.01 to 100 g/10 min and complex viscosity ratio at 0.1 radians/sec greater than 1.10 and comprising 84 to 98.75 weight percent base resin, 0.25 to 8 weight percent montmorillonite clay modified with dimethyl dihydrogenated tallow ammonium chloride and having a modifier concentration of 90 to 130 meq/100 g, and 0.25 to 8 weight percent of a copolymer of ethylene and 3 to 35 weight percent vinyl acetate having a melt index from 0.25 to 40 g/10 min; the weight ratio of modified montmorillonite clay to ethylene-vinyl acetate copolymer being from 1:1 to 1:0.25.

~~9.~~⁸ (Previously Amended): The composite of Claim ~~3~~² having a melt index of 0.01 to 100 g/10 min and complex viscosity ratio at 0.1 radians/sec greater than 1.10 and comprising 84 to 98.75 weight percent base resin, 0.25 to 8 weight percent montmorillonite clay modified with dimethyl dihydrogenated tallow ammonium chloride and having a modifier concentration of 90 to 130 meq/100 g and 0.25 to 8 weight percent of an ethylene polymer grafted with 0.2 to 4 weight percent maleic anhydride having a melt index from 0.25 to 40 g/10 min; the weight ratio of modified montmorillonite clay to grafted ethylene polymer being from 1:1 to 1:0.25.

10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

~~14.~~⁹ (Previously Amended): A concentrate useful for the preparation of ethylene polymer composites having improved melt strength comprising 20 to 70 weight percent, based on the total weight of the concentrate, of a carrier resin selected from the group consisting of ethylene homopolymer and copolymers of ethylene and a comonomer selected from the group consisting of C₃₋₈ α-olefins, vinyl C₂₋₄ carboxylates and C₁₋₄ alkyl acrylates and C₁₋₄ alkyl

methacrylates and 30 to 80 weight percent additives comprising an organically modified clay consisting of a smectite clay that has been ion-exchanged and intercalated with a dimethyl dihydrogenated tallow quaternary ammonium ion and an ethylene polymer compatibilizing agent selected from the group consisting of ethylene-vinyl carboxylate copolymers and polymers of ethylene having 0.1 to 8 weight percent ethylenically unsaturated carboxylic acid or derivative monomer copolymerized or grafted, the weight ratio of organically modified clay to compatibilizing agent ranging from 1:5 to 1:0.1.

¹⁰
~~15.~~ (Original): The concentrate of Claim ~~14~~⁹ wherein the organically modified clay is a montmorillonite clay modified with dimethyl dihydrogenated tallow ammonium chloride and the modifier concentration is 90 to 130 meq/100 g and the compatibilizing agent is a copolymer of ethylene and 3 to 35 weight percent vinyl acetate or an ethylene polymer grafted with 0.2 to 4 weight percent maleic anhydride.

¹¹
~~16.~~ (Original): The concentrate of Claim ~~15~~¹⁰ containing 20 to 60 weight percent carrier resin, 40 to 80 percent of a combination of organically modified clay and compatibilizing agent present at a weight ratio of 1:1 to 1:0.25 and, optionally, up to 5 weight percent conventional compounding additives.

¹²
~~17.~~ (Previously Amended): A concentrate useful for the preparation of ethylene-vinyl acetate composites having improved melt strength comprising 20 to 70 weight percent of an ethylene-vinyl acetate copolymer carrier resin and 30 to 80 weight percent organically modified clay consisting of a smectite clay that has been ion-exchanged and intercalated with a dimethyl dihydrogenated tallow quaternary ammonium ion.

¹³
~~18.~~ (Original): The concentrate of Claim ~~17~~¹² wherein the carrier resin is a copolymer of ethylene and 3 to 35 weight percent vinyl acetate and the organically modified clay is a montmorillonite clay modified with dimethyl dihydrogenated tallow ammonium chloride and the modifier concentration is 90 to 130 meq/100g.

¹⁴
~~19.~~ (Original): The concentrate of Claim ~~18~~¹³ containing 20 to 60 weight percent carrier resin and 40 to 80 weight percent organically modified clay.

¹⁵
~~20.~~ (Original): The concentrate of Claim ~~19~~¹⁴ optionally containing up to 5 weight percent conventional compounding additives.